

Notice of Allowability

Application No.

09/827,971

Examiner

Chih-Ching Chow

Applicant(s)

SOULOGLOU ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/25/07.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 8/27/07.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Examiner's Amendment and Statement of Reasons for Allowance

1. This action is responsive to Applicant's amendment filed June 25, 2007.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Ronald R. Demsher, Registration Number 42,478, on August 27, 2007, asking for Terminal Disclaimers for obviating any potential Double Patenting rejection, and put the claims in condition for allowance.

The application has been amended as follows:

1. (Currently Amended) A method of generating an intermediate representation of a register-based program code that refers to a set of registers of a processor, the method comprising the computer implemented steps of:

generating a plurality of register objects each representing a respective one of said registers as referenced by the program code;

generating one or more expression objects each representing a respective operator or operand of said program code as that element arises in the program code; and

generating a network of said register objects and expression objects with each said expression object being referenced by one or more of said register objects to which it relates either directly, or indirectly via references from other of said expression objects.

17. (Currently Amended) A system for generating an intermediate representation of a register-based program code which refers to a set of registers of a processor, comprising:

means for generating a plurality of register objects each representing a respective one of said registers as referenced by the program code[[]];

means for generating one or more expression objects each representing a respective operator or operand of said program code as that element arises in the program code; and

means for generating a network of said register objects and expression objects with each said expression object being referenced by one or more of said register objects to which it relates either directly, or indirectly via references from other of said expression objects.

18. (Currently amended) A system for generating an intermediate representation of a register-based program code written for running on a programmable machine having a set of registers of a processor, the system comprising:

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means for generating a plurality of register objects, each said register object representing a respective one of the set of registers as referenced by the program code; and

means for generating a plurality of expression objects representing fixed values and/or relationships between said fixed values and said said registers according to said program code; and,

means for generating a branched tree-like network of said register objects and said expression objects having all of said register objects at the lowest basic root or tree-trunk level of the network with none of said register objects feeding into any other of said register objects.

-- The End --

Examiner's Statement of Reason(s) for Allowance

3. Claims 1-18 are allowed.

4. The following is an examiner's statement of reasons for allowance:

As Applicant indicates, the prior art of record does not teach or fairly suggest generating an intermediate representation of a register-based program code in the manner and combination in such a manner as recited in each of the independent claims 1, 16, 17, and 18 (see Applicant's REMARKS dated 12/15/2006, pages 6-7, and interview summary 9/12/2006). The dependent claims are allowable for at least the same reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Ching Chow whose telephone number is 571-272-3693. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chih-Ching Chow
Examiner
Art Unit 2191
September 10, 2007

CC



WEI ZHEN
SUPERVISORY PATENT EXAMINER